MARS 2001 - 2003 SCIENCE OPPORTUNITIES

R. Stephen Saunders

Jet Propulsion Laboratory, California Institute of Technology, Pasadena CA, 91109 USA

Saunders@jpl.nasa.gov/Fax: 818 354 0712

The Mars Surveyor Program is currently undergoing a replanning effort following the loss of the Mars Climate Orbiter and the Mars Polar Lander. This paper describes the status of the planned NASA Mars Surveyor Program 2001 orbiter and lander and possible landed and orbiting payloads for the 2003 opportunity. If the 2001 lander is approved for launch, one possible scenario is that the science payload will be sent to a safe landing site in 2003. The '01 and '98 payloads are ideally suited for characterizing martian soils. The site selection process has identified a region of hematite that is level, relatively rock-free and scientifically exciting because it may represent the site of an ancient lake once filled with iron-bearing water. The water has long since evaporated, but may have left behind an enormous deposit of iron oxide. Such, deposits occur on Earth and can seal in evidence of ancient life in a secure mineral envelope. The orbiter is expected to launch on schedule in early 2001. It carries the gamma ray spectrometer, a thermal emission spectrometer (THEMIS) and imager that will map the mineral abundance at selected sites and a radiation experiment. Marie, to assess radiation hazards to humans. The lander payload includes a robotic arm that will deploy a Moessbauer spectrometer to determine the state of iron in the soil. The arm will deliver soil to MECA, the soil and dust characterization experiments. The Mars In Situ Propellant Precursor Experiment (MIP) will produce oxygen from the Martian atmosphere. The Marie radiation experiment will assess radiation hazards on the surface. The panoramic camera is bore-sighted with a thermal emission spectrometer to examine mineralogy. A descent imager (MARDI) will image from parachute deployment to the surface.

DOCUMENT REVIEW TEAM MEETING MINUTES 01/18/00

AGENDA

Acknowledgement Statement Private Ventures Engineering Standards Author Questionnaire Productivity PacificNet Action Items

GENERAL DISCUSSION

- Scott working the acknowledgement rewrite, no change till Scott directs otherwise.
- Productivity will continue for 15 hardcopy documents/week, effort noticed and appreciated.
 Continue to search for reasons that cause interference to that goal.
- Private Ventures, JPL cannot publish private ventures on the Tech Report Server, Linda will makeup separate files for repository
- Engineering Standards, Charlotte reported Ed Momjian wanted Chuck Shinbrot to notify the NASA Centers the standards haven't been screened for ITAR/EAR.
- Dave mentioned that our Policy doesn't address clearances for NASA.
- Author questionnaire, Ed Momjian provided input
- Charlotte to notify Alan re need of PacificNet
- Ed Momijan ended our biweekly sessions with LIAO, team will work together to share information.

PERFORMANCE/FOCUS LIST

The following list are the items we had voted on, those with an * are to be attended to with highest priority.

- Train-on & review for issues/TRAC + coaching
- * Educate X3. outreach entire lab
- * Educate editors to review for ITAR as they're editing
- Reexamine types of review items that should be in our arena
- Everything coming in (and going out) electronically
 Training on how to handle submissions to Jay's server
- Use available technology more effectively
- Co-location of entire team
 Will be complete in December
- * Co-op help, more clerical help Donna is on 1 day, plus

To be covered by Alan and Scott

- Increase budget
- Pursue aspects of self-certification
- Qualify for NASA exemption
- Use checklist & templates

Hovis Money used?

Action Item List

Action Item	Cog. Individual	Status
Create NOC comment checklist/directions for author and or Clarise	Kathy	Created draft/out for review 11/08/99 12/14/99 no change 01/04/00 need feedback
Create reviewer's checklist	Dave	Created draft/out for review 11/30/99 01/04/00 need feedback
TRAC/OPANT training/meeting and check list	Mary Sue	Meetings after the holidays Will set up in January 01/04/00 contacted/will schedule
Customer training sessions 01/04/00 will include Network and Security	Alan Stepakoff/CM/KL	In planning
Ecomm website update	Bonnie Lund/Charlotte	Bonnie/early in the new year FAQs list of questions provided to Charlotte and Kathy for input To be completed 2 nd week of Feb.
Publications THIS WEEK and ICIS Newsbytes	Kathy	Obtaining approvals, pending ok from Alan 01/17/00 Vickie Laidig (ICIS) will be submitting to THIS WEEK and will be publishing in ICIS Newsbytes Completed upon publication
Publications Ethics Briefs	Kathy	01/17/00 Discussion with Vickie (ICIS) to determine who shall submit, pending Vickie agreed to submit to Ethics 01/18/00 Completed upon publication
LIAO approve editors reviewing	Kathy	Next LIAO meeting Ed Momjian had no objection to expanding the review pool, Kathy get agreement in e-mail
LIAO create list of questions for use to query authors	Everyone to participate	Ed thought it would be difficult for LIAO to furnish a list, We can create and submit for their review. Charlotte has created a list. 01/04/00 list distributed, need feedback. Action to be completed in 1 week.
Investigate, understand existing and define requirements for transaction log database requirements	Kathy/Linda/Hao Lee/Jay Dyson/Conception Alverez	01/04/00 No action 01/18/00 date to have interviews completed by end of February
Bibliography requirements	Linda Scott	93-96 completed by end of Dec. 99 97-98 TBD 01/04/00 Linda to talk to Sunjay Linda waiting for Sunjay to appoint an editor
Training for Meeting Maker	Mary Sue	Schedule Demonstration w/Mo

SIA Meeting in San Jose/investigate with Ed Momjian and Alan Stepakoff	Mary Sue	Langdon By end of Februray Investigating	
Ex post facto New Policy	Kathy/Alan	End of February	